Transportation Authority of Marin

April 28, 2005

TO: Transportation Authority of Marin Commissioners

RE: AB-434, 40% Fund, fiscal year 2005/2006 Transportation Funds for Clean Air (TFCA) - Bay Area Air Quality Management District (BAAQMD)

Dear Commissioners:

On February 24, 2005, we notified all cities/County/Special Districts, as well as schools and the College of Marin, regarding the availability of TFCA funds for the fiscal year 2005/2006. Further notification was provided at the meeting with Marin Public Works Directors on March 17, 2005. The deadline for receipt of project proposals was April 1, 2005.

These TFCA Funds are generated through a $4.00 surcharge on vehicle registrations in the Bay Area. Each county receives 40% of these funds generated within their county as "guarantee funds". The remaining 60% of the funds are administered by the Bay Area Air Quality Management District on a region wide competitive basis. By the deadline, we received a total of seven projects from six agencies as follows:

Proposed Projects: FY 2005/2006

Project No.	Sponsor	Project Title	TFCA$ 40% Requested	Total Project Cost	Project Score
05MAR01	Bolinas CPUD	Bolinas CPUD Land Bicycle Path	$40,000	$40,000	75
05MAR02	GGBH&TD	Bike Racks on Golden Gate Transit Buses	$60,000	$300,000	75
05MAR03	Marin County CDA	Fireside Smart Growth Development	$200,000	$300,000	71
05MAR04	Marin Co. Transit District	Ride & Roll: Students Ride Free on Golden Gate Transit	$98,800	$580,000	68
05MAR05	City of Novato	Commuter Bike Connection-South Novato to Entrada Drive	$200,000	$779,920	63
05MAR06	Marin County	Video Conferencing Network	$67,243	$67,243	63
05MAR07	Marin County	Los Ranchitos Road Class II Bikeway	$160,000	$877,424	60
		Total	$526,043	$2,304,587	

Total requested TFCA 40% Funds are $526,043 and the requests meet all the requirements of the TFCA criteria. We reviewed each project's score from the Air Quality point of view, its cost, and past history in receiving previous TFCA funds, and finally, we reviewed the readiness of each project to proceed.

c/o Marin County Department of Public Works, P.O. Box 4186, San Rafael, CA 94913
Phone: 415/499-6570 – Fax: 415/499-3799 – www.marintraffic.org

Recommendation:

1. Approve all seven projects shown in the above table. According to the BAAQMD, we have a net amount of $1,093,656 including unused funds and earned interest, available for programming TFCA 40% Funds FY 05/06. Your approval of the above projects creates an unallocated amount of $549,505 for next future programming.

2. Adopt the attached Resolution authorizing submittal of proposals for AB 434 funds.

Very truly yours,

Craig Tackabery
Executive Director

Attachments: Resolution No. 2005-06 (1 page)
Summary Information (17 pages)
Cost Effectiveness Work Sheets (7 pages)

c: All Applicants Andrea Gordon TAM Staff

RESOLUTION No. 2005-06

RESOLUTION OF THE TRANSPORTATION AUTHORITY OF MARIN (TAM) AUTHORIZING SUBMITTAL OF PROPOSALS, TFCA 40%, AB-434 FUNDS

WHEREAS, the State of California enacted the California Clean Air Act of 1988 requiring Air Districts to adopt, and cities and counties to implement certain transportation control measures in order to improve air quality; and

WHEREAS, the County and cities of Marin County have, in response to the aforementioned State legislation, created the Transportation Authority of Marin to serve as the county congestion management agency; and

WHEREAS, the County of Marin and the Cities of Belvedere, Corte Madera, Fairfax, Larkspur, Mill Valley, Novato, Ross, San Anselmo, San Rafael, Sausalito, and Tiburon, representing a majority of Marin cities and population, originally designated the Marin Congestion Management Agency as the "Program Manager" for AB-434; and

WHEREAS, it is determined that (1)construction of Bolinas Bicycle Path, (2) Bike Racks on Golden Gate Transit Buses, (3) Fireside Smart Growth Development, (4) Ride&Roll: Students Ride Free on Golden Gate Transit, (5) Commuter Bike Connection South Novato Blvd. To Entrada Drive, (6) Video Conferencing Network, and (7) Los Ranchitos Class II Bikeway are the most appropriate and cost-effective strategies currently available within the county for reducing motor vehicle emissions;

NOW, THEREFORE, BE IT RESOLVED that the Executive Director of the Transportation Authority of Marin (TAM) is authorized to submit proposals and carry out the projects related to AB-434.

PASSED AND ADOPTED this 28th day of April 2005, by the following vote, to wit:

AYES: Belvedere, Corte Madera, Fairfax, Larkspur, Marin County, Mill Valley, Novato, San Anselmo, Ross, San Rafael, Sausalito, Tiburon.

NOES:

ABSENT:

_____
Chair
Transportation Authority of Marin

Attest:

_____
Craig Tackabery, Executive Director

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SUMMARY INFORMATION

Program Manager Name: Transportation Authority of Marin (TAM)

Contact Person: Craig Tackabery Phone No.: (415) 499-6582

Address: P.O. Box 4186 San Rafael, CA 94913-4186

Signature: _____ Date: _____

Executive Director

PART A: NEW TFCA FUNDS

1. Estimated FY05/06 DMV revenues as reported by BAAQMD. Line 1a: $ 355,354

   Adjustment between FY04/05 estimate and actual revenue. Line 1b: $ 6,809

   Estimated FY04/05 DMV revenues: Line 1c: $ 351,000

   Actual FY04/05 DMV revenues: Line 1d: $ 357,809

   (Line 1d minus Line 1c equals Line 1b)

2. Interest income. Show interest earned on TFCA funds in calendar year 2004. Line 2: $ 34,943

3. Total new TFCA funds. Add Lines 1a and 1b. Line 3: $ 362,163

PART B: UNALLOCATED TFCA FUNDS

4. Total unallocated funds from previously funded projects and funds that have not been allocated to projects that are available for programming to new projects. Enter zero (0) if there are no unallocated funds. Include TFCA funds available due to project cancellation or projects completed under-budget, and funds not previously allocated. **Complete and attach Summary Information Addendum.** Line 4: $ 696,550

PART C: TOTAL AVAILABLE TFCA FUNDS

5. Add Lines 2, 3 and 4. Line 5: $1,093,656

PART D: FY05/06 TFCA ALLOCATIONS

6. Total TFCA funds budgeted for administration. Line 6: $ 18,108
   (Note: Line 6 cannot exceed 5% of **Line 3**.)

7. Total TFCA funds allocated to new projects. Show the total of all TFCA funds allocated to new projects as shown on the attached project information sheets. Line 7: $ 526,043

8. Total allocations. Add Line 6 plus Line 7. Line 8: $ 544,151
   (Note: Line 8 should not exceed the amount on Line 5.)

PART E: UNALLOCATED FUNDS

9. Total unallocated funds. Subtract Line 8 from Line 5. Enter zero (0) if all available funds are allocated to new projects. Line 9: $ 549,505

Governing Board Resolution:

Attach a copy of the resolution adopted by your Governing Board authorizing the distribution of the above funds. The resolution should state that the projects included in this expenditure program are the most appropriate and cost-effective strategies currently available within the county for reducing motor vehicle emissions. All proposed expenditures must be consistent with the *Clean Air Plan* and Section 44241(b) of the California Health and Safety Code.

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SUMMARY INFORMATION ADDENDUM

Unallocated TFCA Funds Available for Reprogramming

Fiscal Year	BAAQMD Project #	Project Sponsor	Project Name	TFCA Funds Allocated	TFCA Funds Expended	TFCA Funds Available	Code[1]
	97MAR01	Marin County	Tennessee Valley Road Pathway (First Segment)	$150,000	$0	$150,000	CN
	98MAR08	Marin County	Tennessee Valley Bridge and Pathway (Segments 2 through 4)	$231,114	$0	$231,114	CN
	98MAR12	City of Novato	Class 1 Bicycle Path - US-101 (0.27 mi.)	$200,000	$95,226	$104,774	CN
	98MAR15	Town of Tiburon	Electric Vehicle Demonstration - 1 parking enforcement vehicle	$18,882	$12,882	$6,000	CN
	99MAR01	Town of Fairfax	Park and Ride Lot - Olema Rd./Sir Francis Drake	$80,000	$3,250	$76,750	CN
	99MAR05	TAM	Electric Vehicle Demonstration - 4 LDV	$32,000	$0	$32,000	CN
	00MAR03	Marin County	Class 2 Bicycle Lane/Intersection Modifications - Lucas Valley Rd. at Las Galinas (0.10 mi.)	$150,500	$129,318	$21,182	CP
	00MAR08	Marin County	Petaluma Telecommute Center Project	$41,496	$0	$41,496	CN
	01MAR05	Marin County	Tennessee Valley Road Pedestrian Path	$31,199	$0	$31,199	CN
	02MAR07	Town of Tiburon/Police	Police Bicycles	$2,035	$0	$2,035	CN

Total: $696,550

1: Enter CP for completed project.
Enter CN for canceled project.
Enter UF for unallocated funds.

PROJECT INFORMATION

A. Project Number: 05MAR01 B. Project Sponsor: Bolinas Community Public Utilities District (BCPUD)

C. Project Contact: Don Smith
(Member, BCPUD Board of Directors)

D. Contact Phone #: 868-2172
E-mail: donsmith@microweb.com

E. Project Title: BCPUD Land Bicycle Path

F. TFCA $ Allocated: $40,000

G. Total Project Cost: $40,000

H. Project Description:

This project is an off-road bicycle and pedestrian path that will provide a safe and attractive route between the Big Mesa and downtown Bolinas and will be a strong incentive for residents to switch from motor vehicles to alternative transportation for these frequent trips. The Mesa is Bolinas' principal residential area, while almost all services and activities are located downtown - 1 to 2 miles away. The only two roads between these locations, Mesa Road and Terrace Avenue, both have unridable or nonexistent shoulders, steep sections with sharp and blind curves, and fast traffic with insufficient policing to be an effective deterrent.

A dedicated citizens' committee has been working on this problem for several years and has received a Marin Community Foundation award for successfully designing a path system that meets both the safety and aesthetic needs of the community as demonstrated an advisory poll that passed 2-to-1 in November 2002. The overall design consists of two separate projects that join at the intersection of Olema-Bolinas and Mesa Roads as shown on the upper right of the attached Path System map. The project heading from that intersection Northward to the school is being designed by County DPW alongside the road right-of-way and is expected to be funded from the Federal TEA re-authorization presently in Congress, it being a top priority within the County CMA for West Marin bicycle projects. The second project heads South and West from the same intersection through land owned by the Bolinas Community Public Utilities District (BCPUD), with branches terminating downtown and at the edge of the Mesa. Together, the two projects will provide safe, year-round alternative transportation between all key destinations: from residential areas to the school, playing fields, clinic, and the downtown area with its stores, post office, library, and the West Marin Stage bus terminal connecting to Marin City. The subject of the present TFCA Application is the second project, the 4700-ft off-road path on BCPUD land that is shown on the attached map. This second path will provide access to the main activity center of Bolinas and to transit service, and it will bypass the safety hazards of existing roads that are now preventing most residents from using bicycles for transportation between the Mesa and downtown.

Attached is a letter confirming the Transportation Authority of Marin's intent to include the present proposal in the next CMP update. In addition, the Marin County Unincorporated Area Bicycle and Pedestrian Master Plan of June 2001 includes general proposals for Bolinas (p. 90) that connect the locations mentioned above, and it recommends feasibility analysis, public input, environmental review, and formal approval. The route we now propose is the product of having done this work, and it has been approved by the BCPUD Board of Directors subject to funding availability. BCPUD is thereby promoting a land-use and transportation policy that reduces car trips and air pollution in accord with BAAQMD objectives. Further, we are implementing Transportation Control Measures #9 (Improve Bicycle Access and Facilities) and #19 (Pedestrian Travel) of the Bay Area 2000 Clean Air Plan, and implementing TCM B (Bicycle/Pedestrian Program) and TCM C (Transportation for Livable Communities - TLC) of the Revised San Francisco Bay Area Ozone Attainment Plan adopted October 2001. TLC provides

"capital grants to help cities and nonprofit agencies define and implement transportation projects that support community plans." The County-adopted Bolinas Community Plan on pp. 62-63 calls for "the creation of safe and well designed all-weather bicycle, pedestrian and equestrian trails throughout the community", "connecting residential areas like the Mesa with downtown and especially the school." We have prepared a CEQA Notice of Exemption for this project that is on file in the BCPUD office.

We have engaged Jim Jacobsen to help us design the path, and we expect he also will be the contractor. His resume is attached. Jim is an experienced designer and builder of off-road dirt bicycle paths who was recommended to us by the Marin County Bicycle Coalition. We looked at several of his installed projects, talked with his customers, and concluded that he knows his business well. We have had Jim route the path in a long switchback up the hill to the Mesa in consideration of ADA recreational-trail guidelines for grade. This will make the path much more attractive and negotiable for small children and the elderly as well as ADA users. Jim advises us that a dirt path, designed with proper attention to drainage and armored with gravel in wet areas, can be usable year-round with moderate periodic maintenance, which BCPUD will perform as needed under their land stewardship budget. The gravel will have sufficient fines content to provide a hard-packed and stable surface smooth enough for road bikes. The initial cost is half that of asphalt, and asphalt also would detract from the woodsy and natural look of this beautiful tract of open space that Bolinas residents treasure as a refuge. The riding surface will be 5 feet wide with 1.5 feet either side clear of large obstacles. This design will allow safe passing of the low-speed and low-volume traffic that is anticipated (about 60 trips/day each way), while minimizing disruption of the wooded surroundings. Jim's attached bid assumes gravel surface all the way, but in fact we probably will need it for under half the length, which would drop the total project cost to about $40,000.

In summary, we have given long and careful consideration to the surfacing of this path and are proposing packed dirt and gravel instead of asphalt for the following reasons:

- Much more appropriate aesthetically for the surroundings
- Acceptable to the community given their regard of the BCPUD land as a natural refuge
- More enticing to potential users as an attractive route for alternative transportation
- Cost savings of $40,000 of public money
- Confidence in Jim Jacobsen's ability to construct a year-round path that will weather well
- Paving option remains available if deemed preferable later on

I. Project Schedule: Start Date (mo/yr) 08/05 Final Report Due Date (mo/yr) 12/07

J. Final Report Content: Form 3 – Bicycle Project

K. Cost-effectiveness. (worksheet attached)

We estimated the average number of trips per day from the Mesa residential area to downtown by: 1) gathering data from key downtown service managers on numbers of customers per weekday; 2) correcting appropriately for multiple-errand overlap; and 3) multiplying the resulting total by the fraction of customers coming from the Mesa versus elsewhere in the area served by downtown. We omitted weekend days because of added traffic volume from visitors to town and from residents attending downtown events.

The merchant with the largest customer count is the Co-op organic grocery, which averaged 299 transactions/day midweek for the first two weeks of March 2005. The only other grocery is the Bolinas Market, which reports 150-200 customers/day midweek. People tend to prefer one or the other store, but since there are some items not available at both, we assume that 30% of Market customers also visit the Co-op in a given trip, making the total count of grocery customers to be 299 + (175 x 70%) = 422/day.

The library counted 3379 patrons for the month of December 2004 and 2657 for February 2005, or 3018/month average. It is open 17 hours over three midweek days (13 days/month) plus 3 hours on Saturdays for 20

hours/week total, so the average midweek patron count is 3018x(17/20)/13 = 197/day. We estimate that half of library patrons will also do another errand in the same trip, so we count only 98 as additional trips to downtown.

The Stage bus in four trips per midweek day from its downtown depot to Marin City carries about 16 passengers/day. We assume that these passengers will not do other errands except perhaps mail pickup.

Most US Mail customers in our 94924 Zip Code do not get mail delivered and must retrieve it at the Post Office, where there are 930 postboxes in use. Not everyone retrieves their mail every day, but if we assume that 4 out of 5 do, we have 744 trips for mail. However, there is likely to be considerable overlap between people coming downtown for mail and for other errands. We conservatively estimate the fraction of people who come downtown for mail and for no other purpose at 20%, which results in 149 additional trips.

There are many other services downtown. We exclude laundromat, clinic, gas station and saloon customers from the count of potential bicycle users. We do count those using the beach, ATM, video rental, liquor store, hardware store, billiards, knick-knack shops, office services, and museums. Odyssey Video alone reports 50 customers/day average midweek. Based on general observation of downtown activity, we estimate 100 trips for all these purposes combined and excluding overlap with other errands counted above.

From the above data and assumptions, we tally 422 + 98 + 16 + 149 + 100 = 785 round trips to downtown and back per day midweek. The estimate would be higher on weekends, because most services are still available then, and there are in addition many downtown events. The majority of these trips come from the Mesa, and most of the remainder come from elsewhere in the BCPUD water-service area. We calculate the fractional split in two ways. 1) Of the 576 BCPUD water meters in use, 358 of them, or 62%, are on the Mesa. 2) Of the 901 voters registered for 2003 within the BCPUD voting district, 543 of them, or 60%, live on the Mesa, very close to the 62% estimate from water meters. We assume that the downtown customer base splits similarly: that is, 61% of downtown customers, or 479 people/day, will be coming from the Mesa and are therefore potential users of the proposed bicycle path. This is a conservative estimate because of not considering the higher weekend traffic from residents.

Almost everyone traveling from the Mesa to downtown does so by motor vehicle, because the roads are dangerous and the grade is steep. The proposed path omits both of these problems, while additionally presenting a very attractive route through secluded woodland and meadow, and a route that is much more gently graded than the existing roads. Given in addition the high environmental consciousness of the Bolinas community and the short length of the trip downtown, we expect this path to be used frequently both by those who want to avoid using gasoline and by those who want to enjoy the idyllic route. Further incentive is provided by the difficulty of finding parking downtown, especially on high-surf days and weekends, when we have many visitors. A publicity campaign will accompany the path's opening, and word gets around quickly in this small community. There is also a new bike shop downtown that will make it easy for new users to obtain and maintain their bicycles.

We now calculate the percentage of trips between the Mesa and downtown that would shift from car to bicycle given the path. The following data were provided by Eric Anderson at the Marin County Bicycle Coalition (MCBC):

- 7% of local trips Countywide in Marin are now made by bicycle, and the 20-year goal is 20%
- Safe Routes to Schools (SR2S) has shown a 15% reduction in car trips to school from their programs
- In the Netherlands, 40% of local trips are now made by bicycle
- Ten car trips per day are made from the average Marin household

Bolinas is known both for its environmental awareness and for its willingness to trying new ways of living. We already make far fewer car trips per day than the average Marin household: 479 per day from 358 households (water meters) or 1.3 per household, versus 10 countywide. For these reasons and because of the many incentives listed above, we expect our path adoption percentage to be higher than the Countywide figures though probably lower than the Netherlands figure. Based on the MCBC data, we estimate a 14% adoption level averaged over the 20 years "effectiveness" term of the proposed project: that is, an adoption level halfway between the present Countywide level and the 20-year goal. The 20-year effectiveness number is used for the TFCA spreadsheet calculation per BAAQMD recommendation, though we expect the path to last much longer given the planned regular maintenance by BCPUD. Based on observation of bicycle traffic and parking downtown, we estimate that about 1% of trips from the Mesa to downtown are made now by bicycle. Thus, we conclude that 13% more trips will be made by bicycle given the proposed path. Note that this and the MCBC numbers are percentages of total trips

per year (365-day basis). However, the Transportation Authority of Marin asks that we instead use trips per day based on the lesser number of days per year that the path will actually be used (due to rain and such), say 280 days/year. Correcting the data in this way, 13% of trips over 365 days is equivalent to 17% of trips over 280 days plus 0% of trips over the remaining 85 days. The 479 total round trips/day from above times 17% times 2 to convert to one-way trips gives 163 one-way trips/day shifting from car to bicycle. Using these numbers and the 1.7-mile one-way trip length from the middle of the Mesa to downtown, the TFCA spreadsheet yields a Project Cost-Effectiveness (ROG, NOx & weighted PM) of $14,030/ton, well below the threshold for the maximum 60-point score.

L. Comments (if any):

(none)

PROJECT INFORMATION

A. Project Number: 05MAR02 B. Project Sponsor: Golden Gate Bridge, Highway & Trans. District

C. Project Contact: Gayle Prior D. Contact Phone #: (415) 923-2373

E-mail: gprior@goldengate.org

E. Project Title: Bike Racks on Golden Gate Transit Buses

F. TFCA $ Allocated: $ 60,000 G. Total Project Cost: $ 300,000

Other Funding:	Amount	Source
	$240,000	Federal Transit Administration

H. Project Description:

This project will purchase and install bike racks and related equipment on up to 52 – 45' Golden Gate Transit buses (52 racks plus 2 spares). These two-bike capacity bike racks will be installed in the luggage compartment of the buses since it was determined that it would not be safe to operate a 45' bus with a front mounted bike rack in our service area. This project will encourage linked bike and bus travel and provide increase transportation alternatives in GGBH&TD's 60 mile service corridor between Santa Rosa/Novato/San Rafael and San Francisco.

I. Project Schedule: Start Date (mo/yr) 10/1/05 Final Report Due Date (mo/yr) 5/1/07

J. Final Report Content: X

K. A copy of a completed cost-effectiveness worksheet for the project is attached.

L. Comments (if any): This project is supported by the Marin County Bicycle Coalition and will provide bike racks on Golden Gate Transit buses currently without bike racks. Once this project is completed, the entire Golden Gate Transit bus fleet will be equipped with bicycle racks.

PROJECT INFORMATION

A. Project Number: 05MAR03 B.Project Sponsor: Marin County Community Development Agency

C. Project Contact: Barbara Collins, Marin County CDA D. Contact Phone #: 415-499-6697

E-mail: BCollins@co.marin.ca.us

E. Project Title: Fireside Smart Growth Development

F. TFCA $ Allocated: $200,000.00 G. Total Project Cost: $ 300,000.00

Other Funding:

Amount	Source
$100,000	HOME funds

H. Project Description: SEE ATTACHED BELOW**:**

I. Project Schedule: Start Date (mo/yr) Jan. 2006 Final Report Due Date (mo/yr) Dec. 2007

J. Final Report Content: X

K. Attach copy of cost-effectiveness worksheet. Cost-effectiveness worksheets are not needed for the following project types: RIDES Regional Rideshare Program; electric vehicle charging infrastructure; natural gas vehicle fueling infrastructure; clean air vehicle passenger cars, pick-up trucks, and vans with a GVW of 10,000 lbs. or less; clean air buses, heavy-duty trucks, and street sweepers.

L. Comments (if any): SEE ATTACHED BELOW**:**

Fireside Smart Growth Development
Smart Growth / Traffic Calming
Application for Transportation Fund for Clean Air (TFCA)
April 1, 2005

Project Description

The County of Marin Community Development Agency (CDA) in conjunction with Citizens Housing Corporation (CHC), a 501(c)3 nonprofit housing developer, is developing The Fireside Apartments, a 50-unit affordable smart growth housing development in southern Marin County. The project site is located at 115 Shoreline Highway at the site of the old Fireside Inn and Motel.

As part of the overall housing development, the project will include the implementation and construction of specific offsite improvements that contribute to both local and regional smart growth goals. The improvements for which we are requesting funds from TFCA are as follows:

1. Implementation of a new signalized pedestrian crosswalk across Shoreline Highway to provide safe access between the project site and the Manzanita Regional Transit Center and the existing regional pedestrian/bicycle/equestrian Shoreline Trail System.
2. Implementation of a new pedestrian pathway from the project site to the proposed crosswalk, which would create a safe, pedestrian friendly path of travel that could be utilized by project residents and other visitors and community member

Funds for the overall housing development are provided through a variety of local, state, and federal affordable housing-specific funding sources, as well as private foundations. The remaining portion of the

Smart Growth Features that is not paid for by the TCFA funds will also be covered through these project sources.

TFCA Funding Effectiveness

We have attached the Smart Growth, Ridesharing, Bicycle, and Shuttle Funding Effectiveness Calculator. Per the Worksheet, the Fireside Apartments project generates a TCFA funding effectiveness score of 60 points. The assumptions used to generate this score are detailed in the worksheet attachment and are based on the findings in the *Fireside Housing Project Traffic Study*, prepared in October 2001 by Robert L. Harrison Transportation

Per the data from the Traffic Impact Study referenced above:

> "the project is estimated to generate 31 transit trips, 25 walk trips, and 8 bicycle trips per weekday. The estimates of non-vehicle trips used in this report is based on average person trip rates in the Bay Area and in the Tam Valley / Sausalito area. The location of the project adjacent to the Manzanita Transit Ceter should attract greater than average transit trip generation. The many recreational paths and trails within a short walk of the project site would tend to simulate greater than average walking and bicycle use. *The project would likely generate non-vehicle trips at a higher rate than the average rates used in this report.*
>
> In addition to project generated trips, the project site is expected to serve recreational hikers. The Tamalpais Transportation Improvements Project (TTIP) includes the proposed Visitor Intercept and Parking Facility to be located at the Manzanita Park & Ride Lot. Visitors to the State and National Parks located in southern Marin County would drive to the Manzanita Visitor Intercept and Parking Facility and then walk or be shuttled into the park systems. Some visitors will walk from the Manzanita facility, through the project site, to reach trailheads located on the ridges south of the project. The recareaional use of the project site, and of the other trails in the TTIP project area, would increase pedestrian crossings of the State Highway between the project site and the Manzanita Park & Ride Lot" (page 19, Fireside Housing Impact Study, October 2001).

Until CHC recently demolished all of the previously existing buildings (except the Fireside Inn, which will be rehabilitated and incorporated into the new project as management and community space), the previous use of the site, included a restaurant, motel, a single-family house, and 2 apartment units. Per a Traffic Impact Study conducted in October 2001, by a certified transportation engineer, CHC's proposed Fireside project is expected to generate *169 fewer daily vehicle trips* than the trips generated by the combined previous uses. This is the result of locating dense affordable housing at the transit-rich location.

Other Project Attributes

The Fireside Smart Growth development is an exemplary model of promoting smart growth development. Not only does it provide quality 100% affordable housing, but it also promotes the efficient use of limited land resources that are adjacent to public transportation nodes. It goes even further by linking the housing to public transit and existing pedestrian and bicycle trail systems through the new signalized pedestrian crosswalk and pathway described above.

Clean Air Policies and Programs

Fireside Apartments smart growth design and program features go a long way to promote the region's air quality objectives, especially those land use and transportation policies that help to reduce air pollution from motor vehicles. Specifically, Fireside Apartments promotes smart growth land use and transportation policies and helps to implement the Transportation Control Measures (TCMs) through the following ways:

- development site was selected because of its location directly across the street from one of two (2) public transit nodes in all of Marin County.
- development was designed to provide dense housing in close proximity to an existing public transit resources, thereby furthering the goal of locating new housing on urban-infill sites
- development includes a new signalized pedestrian crosswalk and path to enable residents a safe access to the Manzanita Transit Center and the existing Shoreline Trail System.
- the new crossing will also enable future visitors to the area to potentially access Golden Gate National Recreation Area (GGNRA) public open space and recreational area from the Manzanita Transit Center

Disadvantaged Communities

1) Fireside Apartments is a 50-unit, 100% affordable housing community. The development is in census tract #1282, which is not a disadvantaged community, however, all units will serve disadvantage households as they will be affordable to households earning no more than 60% of the Area Median Income (AMI). The target household population meets the demographic criteria laid out in the report entitled A Guide to the Bay Area's Most Impoverished Neighborhoods. Several units will be affordable to households at 30% AMI and below. Thirty-two (32) units will be set-aside for seniors and eighteen (18) units will be set-aside for low-income families. In addition, 18 of the family and senior units will be more specifically targeted to extremely low-income supportive housing-eligible homeless and disabled households.

2) One Hundred Percent (100%) of all smart growth measures that are being implemented as part of the development of this project will directly benefit the disadvantaged households residing at the Fireside.

3) All of the disadvantaged households at the development will benefit immensely from the smart growth features of the development as these populations often rely on public transportation as their sole transportation source. Furthermore, the close proximity to public transportation and neighborhood-serving retail, enables these households, who often have limited transportation access, to access employment opportunities and daily living necessities.

Promote Alternative Transportation Modes

The Fireside Smart Growth Development will encourage alternatives to automobile transportation and ultimately reduce vehicular trip through the following features:

- providing a safe, pedestrian connection to the existing Manzanita Transit Center, will promote use of the public transit and ridesharing facilities
- working with City Car Share, a local car-sharing organization, to try to provide a shared automobile onsite or across the street at the Manzanita Transit Center, which residents, visitors, and community members can use on an "as-needed" basis to access residential services and nearby amenities. City CarShare estimates that a one carsharing vehicle typically serves at least 25 people.

- providing secured onsite bicycle parking to encourage residents to utilize a bicycle rather than automobile transit.
- reducing the amount of onsite parking at the development discourages automobile use and encourages the use of alternative transportation modes, including the carshare, public transportation, bicycling, and existing regional pedestrian paths, such as the Shoreline Trail System.

partnering with existing regional shuttle services, such as WhistleStop Wheels to provide transportation services to eligible low-income elderly households at the development

PROJECT INFORMATION

A. Project Number: 05MAR04 B. Project Sponsor: Marin County Transit District

C. Project Contact: Amy Van Doren D. Contact Phone #: 415/499-6100

E-mail: avandoren@co.marin.ca.us

E. Project Title: Ride & Roll: Students Ride Free on Golden Gate Transit

F. TFCA $ Allocated: $98,800 G. Total Project Cost: $580,000

Other Funding:	Amount	Source
	$481,200	Transportation Sales Tax
	$X	X

H. Project Description:

This project provides free fares for Marin County middle and high school students to ride Golden Gate Transit buses to attend school within the county commencing August 2005 and continuing through June 2006. This time period constitutes Phase V of program delivery. Positive benefits of the program include: providing alternatives to automobile travel for the trip to school, increasing the number of student taking transit, improving air quality by reducing auto trips and traffic congestion around schools, and improving average daily attendance. School-based trips represent approximately 27% of traffic during the peak morning commute.

Phase I occurred between late February 2003 and mid June 2003, and Phase II from August 2003 to mid December 2003. The third phase started in December 2003 and ends in mid June 2004. In Phase II, 49 out of 58 eligible schools participated in the program. Marin County has conducted a preliminary evaluation of Phase I and II, utilizing rider surveys. Over 41% of participants reported that they had previously traveled by car, 34% reported that they had used Golden Gate Transit buses, and 5% had used yellow school buses. The program resulted in a 65% mode shift in Phase I, and a 61% mode shift in Phase II. According our evaluation, the number of one-way trips shifted to transit was 46,906 in 2003, with an additional 43,177 trips that are no longer stopping at school. The program is in the midst of Phase IV with implementation between August 2004 and June 2005. Based on an average month of use, the implementing agencies estimate that the total tickets used each month is approximately 38,712 total, reflecting a steady increase in demand.

The cost for Phase I was approximately $202,000, and the total cost for Phases II and III was $350,000. The Transit District and our operator, Golden Gate Transit, have agreed to change the basis on which program cost is determined. Total cost of the program is based on two factors: Lost fare revenue for students using Ride & Roll tickets on local bus routes, and the cost to reimburse Golden Gate Transit for Ride & Roll tickets used on regional bus routes, plus ticket production costs. The basis for determining costs is the number of tickets used each month. The current youth discount fare is $1.50 per trip.

The Project supports the following Transportation Control Measures (TCMs):

TCM 3 Improve Area Wide Transit Service

TCM10 Youth Transportation

TCM 13 Transit Use Incentive

Disadvantaged communities will benefit significantly from the project as 45% of current bus riders have incomes under $20,000 per year, and over 25% have incomes of less than $10,000 per year. The largest concentration of transit riders in Marin County is concentrated in low-income communities of the Canal in San Rafael (Zip Code 1122), Central San Rafael (Zip Code 1110) and Marin City (Zip Code 1250).

I. Project Schedule: Start Date (mo/yr) August 2005 Final Report Due Date (mo/yr) August 2006

J. Final Report Content: X

K. Attach copy of cost-effectiveness worksheet. Cost-effectiveness worksheets are not needed for the following project types: RIDES Regional Rideshare Program; electric vehicle charging infrastructure; natural gas vehicle fueling infrastructure; clean air vehicle passenger cars, pick-up trucks, and vans with a GVW of 10,000 lbs. or less; clean air buses, heavy-duty trucks, and street sweepers.

L. Comments (if any):

PROJECT INFORMATION

A. Project Number: 05MAR05 B. Project Sponsor: City of Novato

C. Project Contact: Jerry Novak D. Contact Phone #: 415 899-8959

E-mail jnovak@ci.novato.ca.us

E. Project Title: Commuter Bike Connection – South Novato Boulevard to Entrada Drive

F. TFCA $ Allocated: $ 200,000 G. Total Project Cost: $ 779,220

Other Funding:	Amount	Source
	$ 402,300	TDA Funding
	$ 176,920	Local Funding

H. Project Description: The project will construct 0.6 mile Class I bicycle facility along US 101 between South Novato Boulevard and Enfrente Drive. The bikeway will greatly improve safety and convenience for bicycle commuters and accomplish goals identified in the Marin County North-South Bikeway Feasibility Study and City of Novato Bicycle plan. Current bicycle facility routes bicycle traffic onto US 101 without any barrier interface between bicycle and motor vehicle and the project will greatly enhance the safety of bicycle commuters along this corridor. The project involves extensive earthwork, drainage improvements, retaining wall construction and AC paving.

I. Project Schedule: Start Date (mo/yr) July, 2005 Final Report Due Date (mo/yr) July 2007

J. Final Report Content: Form 3

K. Attach copy of cost-effectiveness worksheet. Cost-effectiveness worksheets are not needed for the following project types: RIDES Regional Rideshare Program; electric vehicle charging infrastructure; natural gas vehicle fueling infrastructure; clean air vehicle passenger cars, pick-up trucks, and vans with a GVW of 10,000 lbs. or less; clean air buses, heavy-duty trucks, and street sweepers.

L. Comments (if any): In implementing the proposed project, the alignment chosen will require right of way from the State of California. The City is currently involved in securing a Coop Agreement with the State in order to acquire the additional right of way for the project. The State of California has endorsed the project and its merits with regard to safety. Additionally, because of the added safety, it will be the goal of the project to promote even higher bicycle commuter activity once the project is in place.

PROJECT INFORMATION

A. Project Number: 05MAR06 B. Project Sponsor: County of Marin

C. Project Contact: Barbara Layton. D. Contact Phone #: 499-7060

E-mail: blayton@co.marin.ca.us

E. Project Title: Video Conference Training Rooms

F. TFCA $ Allocated: $ 67,243 G. Total Project Cost: $67,243

Other Funding:	Amount	Source
	$00	N/A

H. Project Description: The County of Marin purpose for establishing a Video Conference Training network is to reduce the number of car trips and driving time spent by Firefighters traveling to attend mandatory training classes. Currently, firefighters stationed at County of Marin branch fire stations, (Marin City, Throckmorton, Tomales/Dillon Beach, Hicks Valley, and Point Reyes) travel to the district fire station in Woodacre to attend classes. In addition, a Video Conference Training network would also be used to reduce the number of trips by employees from the Marin Civic Center to the Bel Marin Keys office IT training facility that provides technology training for all Marin county employees.

I. Project Schedule: Start Date (mo/yr) 09/2005 Final Report Due Date (mo/yr) 12/2007

J. Final Report Content:

K. Attach copy of cost-effectiveness worksheet. Cost-effectiveness worksheets are not needed for the following project types: electric vehicle charging infrastructure; natural gas vehicle fueling infrastructure; clean air vehicle passenger cars, pick-up trucks, and vans with a GVW of 10,000 lbs. or less; clean air buses, heavy-duty trucks, and street sweepers.

L. Comments (if any):

Row 17 was calculated on the basis that there are 9 major training events which all 27 fire staff attends. The average miles from Marin City, Hicks Valley, Point Reyes, Throckmorton, and Tomales/Dillon Beach fire stations to the Woodacre fire station averaged out to be 28 miles for Trip Length. .

Row 18 was based on the daily mandated training that the firefighters are to complete. These training sessions occur almost daily with exceptions of holidays and weekends for 26 employees. The same average miles that were used in row 17 column C are used in Row 18, column C.

Row 19 was based on the 2004 fiscal year of the overall number of county employees that went to the IST Training Center at 371 Bel Marin Keyes Blvd. in Novato. The length was calculated by employees traveling from the Civic Center location in San Rafael. A video conference training room at the Civic Center will be established to eliminate the travel to Bel Marin Keys office in Novato. The equipment will include 7 new Polycom video phones, with dual monitors and carts. The video phones will be located at the following fire stations, Woodacre, Marin City, Hicks Valley in Petaluma, Throckmorton in Mill Valley, Tomales/Dillon Beach and Point Reyes . There will also be a video phone located at the Bel Marin Keys office in Novato where the IST Trainers are stationed. An existing Polycom video phone is located at the Civic Center building in San Rafael.

PROJECT INFORMATION

A. Project Number: 05MAR07 B. Project Sponsor: Transportation Authority of Marin

C. Project Contact: Jack Baker D. Contact Phone #: (415) 499-6523

E-mail: jbaker@co.marin.ca.us

E. Project Title: Los Ranchitos Road Class II Bikeway

F. TFCA $ Allocated: $ $160,000 G. Total Project Cost: $ 877,424

Other Funding:	Amount	Source
	$717,424	Regional Bicycle and Pedestrian Program (RBPP)

H. Project Description:

Construct Class II Bikeway from Lincoln Avenue northerly to intersection of Ranch Road. Project would constitute a "gap closure" facility connecting existing Class II facilities at each end of the project.

I. Project Schedule: Start Date (mo/yr) 10/06 Final Report Due Date (mo/yr) 12/07

J. Final Report Content: N/A

K. Attach copy of cost-effectiveness worksheet.

L. Comments (if any):

Los Ranchitos Road is a segment of the only north-south roadway in the area which roughly parallels and augments Highway 101. It serves not only vehicular traffic but an increasing number of bicyclists (including bicycle commuters) and pedestrians. This roadway provides an important access to local schools, businesses (including the Northgate Shopping Center), medical facilities (such as nearby Kaiser Hospital) and the Marin County Civic Center as well as extensive residential areas.

The subject segment of Los Ranchitos Road between Lincoln Avenue Ranch Road is relatively narrow (pavement width approximately 22') and has negligible shoulders (please see attached photos), which deter many cyclists and pedestrians. It is expected that the proposed Class II bikeway improvements through this segment will encourage a significant increase in cyclists as well as facilitating pedestrian use.

The project has been supported by local elected officials, the local homeowners association and the Marin County Bicycle Coalition. An environmental document has been completed ("Notice of Exemption", February 14, 2000). Necessary surveying has been previously performed and a preliminary design initiated

RIDESHARING, BICYCLE, SHUTTLE, AND SMART GROWTH PROJECTS

Only make entries in shaded areas.

General Project Information

Project Sponsor:	Bolinas Community PUD	**Date Created:**	Maarch 30, 2005
Project Title:	Bolinas Community PUD Land Bicycle Path	**Application #:**	05MAR01
Project Sponsor Contact:	Don Smith	**Project Type Code:**	7b
Project Sponsor Phone #:	(415) 868-2172	**Calculated by:**	Don Smith
Project Sponsor Address:	P.O. Box 390 270 Elm Road	**Project Sponsor E-mail:**	dpsmith@mcn.org
		Project Sponsor City/Zip:	Bolinas 94924

Cost Effectiveness Inputs

# Years Effectiveness:	20
Total Project Cost:	$40,000
TFCA Cost 40%:	$40,000
TFCA Cost 60%:	$0
Total TFCA Cost:	$40,000

Emission Reduction Calculations

Step 1 - Emissions for Eliminated Trips

# Trips/Day (1-way)	Days/Yr	Trip Length (1-way)	VMT	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Exhaust &Trip End PM10 Emissions (gr/yr) *	Other PM10 Emissions (gr/yr) *	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
163	250	1.7	69,275	51,153	34,405	1,581	14,201	29,281,826	87,140
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	69,275	51,153	34,405	1,581	14,201	29,281,826	87,140

Step 2 - Emissions for New Trips to Access Transit /Ridesharing

A	B	C	D	E	F	G	H	I	J
0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0

Step 3A - Emissions for Medium Duty Shuttle

Enter in Column D - Vehicle GVW - For Shuttles 2=8,501-10,000, 3=10,001-14,000
- For Vanpools 1= 5,751-8,500, 2=8,501-10,000, 3=10,001-14,000

Enter in Column E (Emissions Rating)
- For Shuttles 2=Post-1994 diesel with CARB verified, **Level 3** (85%) filter; 3=Post-1994 diesel with CARB verified, **Level 3** (85%) + **NOx** filter; 4=Post-1994 diesel with CARB verified, **Level 1** (25%) filter; 5=Post-1994 diesel with CARB verified, **Level 2** (50%) filter; 6=1989-1994 gas; 7=LEV; 8=ULEV; 9=SULEV; 10=ZEV
- For Vanpools 1=Baseline default, 7=LEV, 8=ULEV, 9=SULEV, 10=ZEV

# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	Vehicle GVW	Emissions Rating	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Tailpipe PM10 Emissions (gr/yr)	Other PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
				Total	0	0	0	0	0	0	0

Step 3B - Emissions for Buses

Bus Type
- Diesel Bus with CARB verified, **Level 3** (85%) filter: 1 = 1994/95, 2 = 1996-2001, 3 = 2002, 4 = 2003, 5 = 2004
- Diesel Bus with CARB verified, **Level 3** (85%) + NOx reduction filter: 6 = 1994/95, 7 = 1996-2001, 8 = 2002, 9 = 2003, 10 = 2004
- Diesel Bus with CARB verified, **Level 1** (25%) filter: 11 = 1994/95, 12 = 1996-2001, 13 = 2002, 14 = 2003, 15 = 2004
- Diesel Bus with CARB verified, **Level 2** (50%) filter: 16 = 1994/95, 17 = 1996-2001, 18 = 2002, 19 = 2003, 20 = 2004
- Gas Bus 21 = 1989/90, 22 = 1991-1993, 23 = 1994/95, 24 = 1996-2001, 25 = 2002, 26 = 2003, 27 = 2004
- Alternate Fuel Bus (CNG, LNG, or hybrid-electric) NOx certification level 1.5 g/bhp-hr = 28, 1.8 g/bhp-hr = 29, 2.0 g/bhp-hr = 30, 2.5 g/bhp-hr = 31
- Electric Bus = 32

# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	Bus Type	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Tailpipe PM10 Emissions (gr/yr)	Other PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			Total	0	0	0	0	0	0	0

Cost Effectiveness Results

	Annual	Lifetime	
1. VMT Reduced	69,275	1,385,500	Miles
2. Trips Reduced	40,750	815,000	Trips
3. ROG Emissions Reduced	0.06	1.13	Tons
4. NOx Emissions Reduced	0.04	0.76	Tons
5. PM Emissions Reduced	0.02	0.35	Tons
6. CO2 Emissions Reduced	32.2	645.0	Tons
7. Emission Reductions (ROG, NOx & PM)	0.11	2.23	Tons
8. TFCA Project Cost - Cost Effectiveness (ROG, Nox & PM)		$17,920	/Ton
9. TFCA Project Cost - Cost Effectiveness (ROG, NOx & Weighted PM)		$15,713	/Ton

* Weighted PM 10 means that tailpipe PM emissions have been multiplied by factor of 10, consistent w CARB methodology for Carl Moyer Program, to reflect the negative impact of tailpipe PM on public health.

Score

Criteria	Points
1. TFCA Funding Effectiveness	60
2. Other Project Attributes	
3. Clean Air Policies & Programs	10
4. Disadvantaged Communities	
5. Promote Alternative Transportation Mc	5
Total	75

Notes

If the project involves filters, does the Air District purchase at least one of them? Yes No If yes, PM Fund sponsors must also do monitoring form #5.

Instructions for Steps 1, 2, 3:

Step 1: Data for vehicle trips that project will eliminate:
Enter # one-way trips reduced per day (one round trip = 2 one-way trips), # days per year, and average one-way trip length in Columns A, B, and C
Note: Clearly explain your assumptions.
Step 2: Data for vehicle trips to access transit or vanpool:
This step accounts for the short access trips from home to transit station or vanpool pick-up point (e.g. Park & Ride lot).

Step 3: Data for shuttle or vanpool trips:
Use Step 3A for medium duty vehicles
* Enter Gross Vehicle Weight category in Column D
Ensure that Shuttles only use "2" or "3". Vanpools should be "1"
* Enter emissions ratings in Column E
Note that different emission ratings are available to shuttles versus vanpools
* Enter "1" in Columns D & E and "0" in Column F if you do not have a vehicle to enter in one of the rows.
* Enter in Column F total annual miles for all the shuttle/ vanpool vehicles

Use Step 3B for buses:
* In Column D, enter the proper number (1 through 27) that corresponds to the bus that will be used.
* In Column E enter the combined total annual miles for all the
* Enter "1" in Column D and "0" in Column E if you do not have in one of the rows.

RIDESHARING, BICYCLE, SHUTTLE, AND SMART GROWTH PROJECTS

Only make entries in shaded areas.

General Project Information

		Date Created:	2/22/2005
Project Sponsor:	Golden Gate Bridge, Highway & Trans. District	**Application #:**	05MAR02
Project Title:	Bike Racks on Golden Gate Transit Buses	**Project Type Code:**	7f
Project Sponsor Contact:	Gayle Prior	**Calculated by:**	gp
Project Sponsor Phone #:	(415) 923-2383	**Project Sponsor E-mail:**	gprior@goldengate.org
Project Sponsor Address:	P.O. Box 9000, Presidio Station, San Francisco, C/	**Project Sponsor City/Zip:**	San Francisco, CA 94129

Cost Effectiveness Inputs

# Years Effectiveness:	10
Total Project Cost:	$300,000
TFCA Cost 40%:	$60,000
TFCA Cost 60%:	$0
Total TFCA Cost:	$60,000

Emission Reduction Calculations

Step 1 - Emissions for Eliminated Trips

A	B	C	D	E	F	G	H	I	J
# Trips/Day (1-way)	Days/Yr	Trip Length (1-way)	VMT	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Exhaust &Trip End PM10 Emissions (gr/yr) *	Other PM10 Emissions (gr/yr) *	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
40	200	33	264,000	93,736	107,336	3,816	54,120	111,590,069	204,888
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	264,000	93,736	107,336	3,816	54,120	111,590,069	204,888

Step 2 - Emissions for New Trips to Access Transit /Ridesharing

A	B	C	D	E	F	G	H	I	J
0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0

Step 3A - Emissions for Medium Duty Shuttle

Enter in Column D - Vehicle GVW
- For Shuttles 2=8,501-10,000, 3=10,001-14,000
- For Vanpools 1= 5,751-8,500, 2=8,501-10,000, 3=10,001-14,000

Enter in Column E (Emissions Rating)
- For Shuttles 2=Post-1994 diesel with CARB verified, **Level 3** (65%) filter; 3=Post-1994 diesel with CARB verified, **Level 3** (85%) + **NOx** filter; 4=Post-1994 diesel with CARB verified, **Level 1** (25%) filter; 5=Post-1994 diesel with CARB verified, **Level 2** (50%) filter; 6=1989-1994 gas; 7=LEV; 8=ULEV; 9=SULEV; 10=ZEV
- For Vanpools 1=Baseline default, 7=LEV, 8=ULEV, 9=SULEV, 10=ZEV

A	B	C	D	E	F	G	H	I	J	K	L
# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	Vehicle GVW	Emissions Rating	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Tailpipe PM10 Emissions (gr/yr)	Other PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
				Total	0	0	0	0	0	0	0

Step 3B - Emissions for Buses

Bus Type
- Diesel Bus with CARB verified, **Level 3** (85%) filter: 1 = 1994/95, 2 = 1996-2001, 3 = 2002, 4 = 2003, 5 = 2004
- Diesel Bus with CARB verified, **Level 3** (85%) + NOx reduction filter: 6 = 1994/95, 7 = 1996-2001, 8 = 2002, 9 = 2003, 10 = 2004
- Diesel Bus with CARB verified, **Level 1** (25%) filter: 11 = 1994/95, 12 = 1996-2001, 13 = 2002, 14 = 2003, 15 = 2004
- Diesel Bus with CARB verified, **Level 2** (50%) filter: 16 = 1994/95, 17 = 1996-2001, 18 = 2002, 19 = 2003, 20 = 2004
- Gas Bus 21 = 1989/90, 22 = 1991-1993, 23 = 1994/95, 24 = 1996-2001, 25 = 2002, 26 = 2003, 27 = 2004
- Alternate Fuel Bus (CNG, LNG, or hybrid-electric) NOx certification level 1.5 g/bhp-hr = 28, 1.8 g/bhp-hr = 29, 2.0 g/bhp-hr = 30, 2.5 g/bhp-hr = 31
- Electric Bus = 32

A	B	C	D	E	F	G	H	I	J	K
# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	Bus Type	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Tailpipe PM10 Emissions (gr/yr)	Other PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			Total	0	0	0	0	0	0	0

Notes

If the project involves filters, does the Air District purchase at least one of them?
Yes No If yes, PM Fund sponsors must also do monitoring form #5.

Instructions for Steps 1, 2, 3:

Step 1: Data for vehicle trips that project will eliminate:
Enter # one-way trips reduced per day (one round trip = 2 one-way trips), # days per year, and average one-way trip length in Columns A, B, and C
Note: Clearly explain your assumptions.

Step 2: Data for vehicle trips to access transit or vanpool:
This step accounts for the short access trips from home to transit station or vanpool pick-up point (e.g. Park & Ride lot).

Step 3: Data for shuttle or vanpool trips:
Use Step 3A for medium duty vehicles
* Enter Gross Vehicle Weight category in Column D
  Ensure that Shuttles only use "2" or "3". Vanpools should be "1"
* Enter emissions ratings in Column E
  Note that different emission ratings are available to shuttles versus vanpools
* Enter "1" in Columns D & E and "0" in Column F if you do not have a vehicle to enter in one of the rows.
* Enter in Column F total annual miles for all the shuttle/ vanpool vehicles

Use Step 3B for buses:
* In Column D, enter the proper number (1 through 27) that corresponds to the bus that will be used.
* In Column E enter the combined total annual miles for all the buses.
* Enter "1" in Column D and "0" in Column E if you do not have a vehi to enter in one of the rows.

Cost Effectiveness Results

	Annual	Lifetime	
1. VMT Reduced	264,000	2,640,000	Miles
2. Trips Reduced	8,000	80,000	Trips
3. ROG Emissions Reduced	0.10	1.03	Tons
4. NOx Emissions Reduced	0.12	1.18	Tons
5. PM Emissions Reduced	0.06	0.64	Tons
6. CO2 Emissions Reduced	122.9	1229.0	Tons
7. Emission Reductions (ROG, NOx & PM)	0.29	2.85	Tons
8. TFCA Project Cost - Cost Effectiveness (ROG, Nox & PM)		$21,034	/Ton
9. TFCA Project Cost - Cost Effectiveness (ROG, NOx & Weighted PM)		$18,572	/Ton

* Weighted PM 10 means that tailpipe PM emissions have been multiplied by factor of 10, consistent w CARB methodology for Carl Moyer Program, to reflect the negative impact of tailpipe PM on public health.

Scoring

Criteria	Points
1. TFCA Funding Effectiveness	60
2. Other Project Attributes	
3. Clean Air Policies & Programs	10
4. Disadvantaged Communities	0
5. Promote Alternative Transportation Modes	5
Total	75

RIDESHARING, BICYCLE, SHUTTLE, AND SMART GROWTH PROJECTS

Only make entries in shaded areas.

General Project Information

Project Sponsor:	Marin County Community Development Agency	**Date Created:**	29-Mar-05
Project Title:	Fireside Smart Growth Development	**Application #:**	05MAR03
Project Sponsor Contact:	Barbara Collins	**Project Type Code:**	9b
Project Sponsor Phone #:	415-499-6697	**Calculated by:**	Barbara Collins
Project Sponsor Address:	3501 Civic Center Drive, Room 308	**Project Sponsor E-mail:**	BCollins@co.marin.ca.us
		Project Sponsor City/Zip:	San Rafael, CA 94108

Cost Effectiveness Inputs

# Years Effectiveness:	20	based on bicycle an
Total Project Cost:	$300,000	
TFCA Cost 40%:	$200,000	
TFCA Cost 60%:		
Total TFCA Cost:	$200,000	

Emission Reduction Calculations

Step 1 - Emissions for Eliminated Trips

A	B	C	D	E	F	G	H	I	J
# Trips/Day (1-way)	Days/Yr	Trip Length (1-way)	VMT	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Exhaust &Trip End PM10 Emissions (gr/yr) *	Other PM10 Emissions (gr/yr) *	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
233	230	5.655	303,051	115,808	102,260	5,047	62,126	128,096,713	223,114
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	303,051	115,808	102,260	5,047	62,126	128,096,713	223,114

Step 2 - Emissions for New Trips to Access Transit /Ridesharing

A	B	C	D	E	F	G	H	I	J
0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0

Step 3A - Emissions for Medium Duty Shuttle

Enter in Column D - Vehicle GVW - For Shuttles 2=8,501-10,000, 3=10,001-14,000
- For Vanpools 1= 5,751-8,500, 2=8,501-10,000, 3=10,001-14,000

Enter in Column E (Emissions Rating) - For Shuttles 2=Post-1994 diesel with CARB verified, **Level 3** (85%) filter; 3=Post-1994 diesel with CARB verified, **Level 3** (85%) + **NOx** filter; 4=Post-1994 diesel with CARB verified, **Level 1** (25%) filter; 5=Post-1994 diesel with CARB verified, **Level 2** (50%) filter; 6=1989-1994 gas; 7=LEV; 8=ULEV; 9=SULEV; 10=ZEV

- For Vanpools 1=Baseline default, 7=LEV, 8=ULEV, 9=SULEV, 10=ZEV

A	B	C	D	E	F	G	H	I	J	K	L
# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	Vehicle GVW	Emissions Rating	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Tailpipe PM10 Emissions (gr/yr)	Other PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
				Total	0	0	0	0	0	0	0

Step 3B - Emissions for Buses

Bus Type
- Diesel Bus with CARB verified, **Level 3** (85%) filter: 1 = 1994/95, 2 = 1996-2001, 3 = 2002, 4 = 2003, 5 = 2004
- Diesel Bus with CARB verified, **Level 3** (85%) + NOx reduction filter: 6 = 1994/95, 7 = 1996-2001, 8 = 2002, 9 = 2003, 10 = 2004
- Diesel Bus with CARB verified, **Level 1** (25%) filter: 11 = 1994/95, 12 = 1996-2001, 13 = 2002, 14 = 2003, 15 = 2004
- Diesel Bus with CARB verified, **Level 2** (50%) filter: 16 = 1994/95, 17 = 1996-2001, 18 = 2002, 19 = 2003, 20 = 2004
- Gas Bus 21 = 1989/90, 22 = 1991-1993, 23 = 1994/95, 24 = 1996-2001, 25 = 2002, 26 = 2003, 27 = 2004
- Alternate Fuel Bus (CNG, LNG, or hybrid-electric) NOx certification level 1.5 g/bhp-hr = 28, 1.8 g/bhp-hr = 29, 2.0 g/bhp-hr = 30, 2.5 g/bhp-hr = 31
- Electric Bus = 32

A	B	C	D	E	F	G	H	I	J	K
# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	Bus Type	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Tailpipe PM10 Emissions (gr/yr)	Other PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			Total	0	0	0	0	0	0	0

Notes

If the project involves filters, does the Air District purchase at least one of them?
Yes No If yes, PM Fund sponsors must also do monitoring form #5.

Instructions for Steps 1, 2, 3:

Step 1: Data for vehicle trips that project will eliminate:
Enter # one-way trips reduced per day (one round trip = 2 one-way trips), # days per year, and average one-way trip length in Columns A, B, and C
Note: Clearly explain your assumptions.
Step 2: Data for vehicle trips to access transit or vanpool:
This step accounts for the short access trips from home to transit station or vanpool pick-up point (e.g. Park & Ride lot).

Step 3: Data for shuttle or vanpool trips:
Use Step 3A for medium duty vehicles
* Enter Gross Vehicle Weight category in Column D
Ensure that Shuttles only use "2" or "3". Vanpools should be "1"
* Enter emissions ratings in Column E
Note that different emission ratings are available to shuttles versus vanpools
* Enter "1" in Columns D & E and "0" in Column F if you do not have a vehicle to enter in one of the rows.
* Enter in Column F total annual miles for all the shuttle/ vanpool vehicles

Use Step 3B for buses:
* In Column D, enter the proper number (1 through 27) that corresponds to the bus that will be used.
* In Column E enter the combined total annual miles for all the
* Enter "1" in Column D and "0" in Column E if you do not have in one of the rows.

Cost Effectiveness (Annual & Total)

	Annual	Lifetime	
1. VMT Reduced	303,051	6,061,029	Miles
2. Trips Reduced	53,590	1,071,800	Trips
3. ROG Emissions Reduced	0.13	2.55	Tons
4. NOx Emissions Reduced	0.11	2.25	Tons
5. PM Emissions Reduced	0.07	1.48	Tons
6. CO2 Emissions Reduced	141.1	2821.5	Tons
7. Emission Reductions (ROG, NOx & PM)	0.31	6.28	Tons
8. TFCA Project Cost - Cost Effectiveness (ROG, Nox & PM)		$31,833	/Ton
9. TFCA Project Cost - Cost Effectiveness (ROG, NOx & Weighted PM)		$27,460	/Ton

* Weighted PM 10 means that tailpipe PM emissions have been multiplied by factor of 10, consistent w CARB methodology for Carl Moyer Program, to reflect the negative impact of tailpipe PM on public health.

Score

Criteria	Points
1. TFCA Funding Effectiveness	56
2. Other Project Attributes	
3. Clean Air Policies & Programs	10
4. Disadvantaged Communities	
5. Promote Alternative Transportation M	5
Total	71

RIDESHARING, BICYCLE, SHUTTLE, AND SMART GROWTH PROJECTS

Only make entries in shaded areas.

General Project Information

		Date Created:	4/1/2005
Project Sponsor:	County of Marin	**Application #:**	05MAR04
Project Title:	Ride & Roll Students Ride Free on GG Transit	**Project Type Code:**	1a,b
Project Sponsor Contact:	Amy Van Doren	**Calculated by:**	Amy Van Doren
Project Sponsor Phone #:	415/499-6100	**Project Sponsor E-mail:**	avandoren@co.marin.ca.us
Project Sponsor Address:	P.O. Box 4186, San Rafael, CA 94913-4186	**Project Sponsor City/Zip:**	Marin County

Cost Effectiveness Inputs

# Years Effectiveness:	1
Total Project Cost:	$580,000
TFCA Cost 40%:	$98,800
TFCA Cost 60%:	
Total TFCA Cost:	$98,800

Emission Reduction Calculations

Step 1 - Emissions for Eliminated Trips

A # Trips/Day (1-way)	B Days/Yr	C Trip Length (1-way)	D VMT	E ROG Emissions (gr/yr)	F NOx Emissions (gr/yr)	G Exhaust &Trip End PM10 Emissions (gr/yr) *	H Other PM10 Emissions (gr/yr) *	I CO2 Emissions (gr/yr)	J Total ROG, NOX & PM Emissions (gr/yr)
430	180	5	387,000	286,148	260,451	6,579	79,335	163,580,897	553,178
409	180	3	220,860	209,743	168,516	3,092	45,276	93,355,237	381,352
			0	0	0	0	0	0	0
		Total	607,860	495,891	428,967	9,671	124,611	256,936,134	934,529

Step 2 - Emissions for New Trips to Access Transit /Ridesharing

A	B	C	D	E	F	G	H	I	J
100	180	1	18,000	36,018	21,834	522	3,690	7,608,414	58,374
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	18,000	36,018	21,834	522	3,690	7,608,414	58,374

Step 3A - Emissions for Medium Duty Shuttle

Enter in Column D - Vehicle GVW
- For Shuttles 2=8,501-10,000, 3=10,001-14,000
- For Vanpools 1= 5,751-8,500, 2=8,501-10,000, 3=10,001-14,000

Enter in Column E (Emissions Rating)
- For Shuttles 2=Post-1994 diesel with CARB verified, **Level 3** (85%) filter; 3=Post-1994 diesel with CARB verified, **Level 3** (85%) + **NOx** filter; 4=Post-1994 diesel with CARB verified, **Level 1** (25%) filter; 5=Post-1994 diesel with CARB verified, **Level 2** (50%) filter; 6=1989-1994 gas; 7=LEV; 8=ULEV; 9=SULEV; 10=ZEV
- For Vanpools 1=Baseline default, 7=LEV, 8=ULEV, 9=SULEV, 10=ZEV

A # Vehicles	B Engine Year, Make, & Model	C Retrofit Device Name	D Vehicle GVW	E Emissions Rating	F Total Annual VMT (sum all vehicles)	G ROG Emissions (gr/yr)	H NOx Emissions (gr/yr)	I Tailpipe PM10 Emissions (gr/yr)	J Other PM10 Emissions (gr/yr)	K CO2 Emissions (gr/yr)	L Total ROG, NOX & PM Emissions (gr/yr)
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
				Total	0	0	0	0	0	0	0

Step 3B - Emissions for Buses

Bus Type
- Diesel Bus with CARB verified, **Level 3** (85%) filter: 1 = 1994/95, 2 = 1996-2001, 3 = 2002, 4 = 2003, 5 = 2004
- Diesel Bus with CARB verified, **Level 3** (85%) + NOx reduction filter: 6 = 1994/95, 7 = 1996-2001, 8 = 2002, 9 = 2003, 10 = 2004
- Diesel Bus with CARB verified, **Level 1** (25%) filter: 11 = 1994/95, 12 = 1996-2001, 13 = 2002, 14 = 2003, 15 = 2004
- Diesel Bus with CARB verified, **Level 2** (50%) filter: 16 = 1994/95, 17 = 1996-2001, 18 = 2002, 19 = 2003, 20 = 2004
- Gas Bus 21 = 1989/90, 22 = 1991-1993, 23 = 1994/95, 24 = 1996-2001, 25 = 2002, 26 = 2003, 27 = 2004
- Alternate Fuel Bus (CNG, LNG, or hybrid-electric) NOx certification level 1.5 g/bhp-hr = 28, 1.8 g/bhp-hr = 29, 2.0 g/bhp-hr = 30, 2.5 g/bhp-hr = 31
- Electric Bus = 32

A # Vehicles	B Engine Year, Make, & Model	C Retrofit Device Name	D Bus Type	E Total Annual VMT (sum all vehicles)	F ROG Emissions (gr/yr)	G NOx Emissions (gr/yr)	H Tailpipe PM10 Emissions (gr/yr)	I Other PM10 Emissions (gr/yr)	J CO2 Emissions (gr/yr)	K Total ROG, NOX & PM Emissions (gr/yr)
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			Total	0	0	0	0	0	0	0

Notes

If the project involves filters, does the Air District purchase at least one of them?
Yes No If yes, PM Fund sponsors must also do monitoring form #5.

Instructions for Steps 1, 2, 3:

Step 1: Data for vehicle trips that project will eliminate:
Enter # one-way trips reduced per day (one round trip = 2 one-way trips), # days per year, and average one-way trip length in Columns A, B, and C
Note: Clearly explain your assumptions.
Step 2: Data for vehicle trips to access transit or vanpool:
This step accounts for the short access trips from home to transit station or vanpool pick-up point (e.g. Park & Ride lot).

Step 3: Data for shuttle or vanpool trips:
Use Step 3A for medium duty vehicles
* Enter Gross Vehicle Weight category in Column D
  Ensure that Shuttles only use "2" or "3". Vanpools should be "1"
* Enter emissions ratings in Column E
  Note that different emission ratings are available to shuttles versus vanpools
* Enter "1" in Columns D & E and "0" in Column F if you do not have a vehicle to enter in one of the rows.
* Enter in Column F total annual miles for all the shuttle/ vanpool vehicles

Use Step 3B for buses:
* In Column D, enter the proper number (1 through 27) that corresponds to the bus that will be used.
* In Column E enter the combined total annual miles for all the
* Enter "1" in Column D and "0" in Column E if you do not have in one of the rows.

Cost Effectiveness Results

	Annual	Lifetime	
1. VMT Reduced	589,860	589,860	Miles
2. Trips Reduced	133,020	133,020	Trips
3. ROG Emissions Reduced	0.51	0.51	Tons
4. NOx Emissions Reduced	0.45	0.45	Tons
5. PM Emissions Reduced	0.14	0.14	Tons
6. CO2 Emissions Reduced	274.6	274.6	Tons
7. Emission Reductions (ROG, NOx & PM)	1.10	1.10	Tons
8. TFCA Project Cost - Cost Effectiveness (ROG, Nox & PM)		**$89,973**	/Ton
9. TFCA Project Cost - Cost Effectiveness (ROG, NOx & Weightred PM)		**$83,110**	/Ton

* Weighted PM 10 means that tailpipe PM emissions have been multiplied by factor of 10, consistent w CARB methodology for Carl Moyer Program, to reflect the negative impact of tailpipe PM on public health.

Scoring

Criteria	Points
1. TFCA Funding Effectiveness	28
2. Other Project Attributes	15
3. Clean Air Policies & Programs	10
4. Disadvantaged Communities	10
5. Promote Alternative Transportation Mc	5
Total	68

RIDESHARING, BICYCLE, SHUTTLE, AND SMART GROWTH PROJECTS

Only make entries in shaded areas.

General Project Information

		Date Created:	March 17,2005
Project Sponsor:	City of Novato	**Application #:**	05MAR05
Project Title:	Commuter Bike Connection-S. Novato Bl to Entrada Dr.	**Project Type Code:**	7a
Project Sponsor Contact:	Jerry Novak	**Calculated by:**	FNI
Project Sponsor Phone #:	9415) 899-8959	**Project Sponsor E-mail:**	jnovak@ci.novato.ca.us
Project Sponsor Address:	75 Rowland Way, Ste. 200 Novato, CA 94945-5054	**Project Sponsor City/Zip:**	Novato/94945-5054

Cost Effectiveness Inputs

# Years Effectiveness:	20
Total Project Cost:	$779,920
TFCA Cost 40%:	$200,000
TFCA Cost 60%:	$0
Total TFCA Cost:	$200,000

Emission Reduction Calculations

Step 1 - Emissions for Eliminated Trips

# Trips/Day (1-way)	Days/Yr	Trip Length (1-way)	VMT	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Exhaust &Trip End PM10 Emissions (gr/yr) *	Other PM10 Emissions (gr/yr) *	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
75	254	6	114,300	42,672	38,119	1,886	23,432	48,313,428	82,677
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	114,300	42,672	38,119	1,886	23,432	48,313,428	82,677

Step 2 - Emissions for New Trips to Access Transit /Ridesharing

A	B	C	D	E	F	G	H	I	J
0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0

Step 3A - Emissions for Medium Duty Shuttle

Enter in Column D - Vehicle GVW - For Shuttles 2=8,501-10,000, 3=10,001-14,000
- For Vanpools 1= 5,751-8,500, 2=8,501-10,000, 3=10,001-14,000

Enter in Column E (Emissions Rating) - For Shuttles 2=Post-1994 diesel with CARB verified, **Level 3** (85%) filter; 3=Post-1994 diesel with CARB verified, **Level 3** (85%) + **NOx** filter; 4=Post-1994 diesel with CARB verified, **Level 1** (25%) filter; 5=Post-1994 diesel with CARB verified, **Level 2** (50%) filter; 6=1989-1994 gas; 7=LEV; 8=ULEV; 9=SULEV; 10=ZEV

- For Vanpools 1=Baseline default, 7=LEV, 8=ULEV, 9=SULEV, 10=ZEV

# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	Vehicle GVW	Emissions Rating	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Tailpipe PM10 Emissions (gr/yr)	Other PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
				Total	0	0	0	0	0	0	0

Step 3B - Emissions for Buses

Bus Type
- Diesel Bus with CARB verified, **Level 3** (85%) filter: 1 = 1994/95, 2 = 1996-2001, 3 = 2002, 4 = 2003, 5 = 2004
- Diesel Bus with CARB verified, **Level 3** (85%) + NOx reduction filter: 6 = 1994/95, 7 = 1996-2001, 8 = 2002, 9 = 2003, 10 = 2004
- Diesel Bus with CARB verified, **Level 1** (25%) filter: 11 = 1994/95, 12 = 1996-2001, 13 = 2002, 14 = 2003, 15 = 2004
- Diesel Bus with CARB verified, **Level 2** (50%) filter: 16 = 1994/95, 17 = 1996-2001, 18 = 2002, 19 = 2003, 20 = 2004
- Gas Bus 21 = 1989/90, 22 = 1991-1993, 23 = 1994/95, 24 = 1996-2001, 25 = 2002, 26 = 2003, 27 = 2004
- Alternate Fuel Bus (CNG, LNG, or hybrid-electric) NOx certification level 1.5 g/bhp-hr = 28, 1.8 g/bhp-hr = 29, 2.0 g/bhp-hr = 30, 2.5 g/bhp-hr = 31
- Electric Bus = 32

# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	Bus Type	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Tailpipe PM10 Emissions (gr/yr)	Other PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			Total	0	0	0	0	0	0	0

Cost Effectiveness Results

	Annual	Lifetime	
1. VMT Reduced	114,300	2,286,000	Miles
2. Trips Reduced	19,050	381,000	Trips
3. ROG Emissions Reduced	0.05	0.94	Tons
4. NOx Emissions Reduced	0.04	0.84	Tons
5. PM Emissions Reduced	0.03	0.56	Tons
6. CO2 Emissions Reduced	53.2	1064.2	Tons
7. Emission Reductions (ROG, NOx & PM)	0.12	2.34	Tons
8. TFCA Project Cost - Cost Effectiveness (ROG, Nox & PM)		$85,573	/Ton
9. TFCA Project Cost - Cost Effectiveness (ROG, NOx & Weightred PM)		$73,772	/Ton

* Weighted PM 10 means that tailpipe PM emissions have been multiplied by factor of 10, consistent w CARB methodology for Carl Moyer Program, to reflect the negative impact of tailpipe PM on public health.

Scoring

Criteria	Points
1. TFCA Funding Effectiveness	33
2. Other Project Attributes	15
3. Clean Air Policies & Programs	10
4. Disadvantaged Communities	
5. Promote Alternative Transportation Mc	5
Total	63

Notes

If the project involves filters, does the Air District purchase at least one of them?
Yes No If yes, PM Fund sponsors must also do monitoring form #5.

Instructions for Steps 1, 2, 3:

Step 1: Data for vehicle trips that project will eliminate:
Enter # one-way trips reduced per day (one round trip = 2 one-way trips), # days per year, and average one-way trip length in Columns A, B, and C
Note: Clearly explain your assumptions.

Step 2: Data for vehicle trips to access transit or vanpool:
This step accounts for the short access trips from home to transit station or vanpool pick-up point (e.g. Park & Ride lot).

Step 3: Data for shuttle or vanpool trips:
Use Step 3A for medium duty vehicles
* Enter Gross Vehicle Weight category in Column D
Ensure that Shuttles only use "2" or "3". Vanpools should be "1"
* Enter emissions ratings in Column E
Note that different emission ratings are available to shuttles versus vanpools
* Enter "1" in Columns D & E and "0" in Column F if you do not have a vehicle to enter in one of the rows.
* Enter in Column F total annual miles for all the shuttle/ vanpool vehicles

Use Step 3B for buses:
* In Column D, enter the proper number (1 through 27) that corresponds to the bus that will be used.
* In Column E enter the combined total annual miles for all the b
* Enter "1" in Column D and "0" in Column E if you do not have a in one of the rows.

RIDESHARING, BICYCLE, SHUTTLE, AND SMART GROWTH PROJECTS

Only make entries in shaded areas.

General Project Information

Project Sponsor:	County of Marin	**Date Created:**	3/18/2005
Project Title:	Video Conferencing Network	**Application #:**	05MAR06
Project Sponsor Contact:	Barbara Layton	**Project Type Code:**	11a
Project Sponsor Phone #:	499-7060	**Calculated by:**	ss
Project Sponsor Address:	3501 Civic Center Drive	**Project Sponsor E-mail:**	blayton@co.marin.ca.us
		Project Sponsor City/Zip:	94903

Cost Effectiveness Inputs

# Years Effectiveness:	5
Total Project Cost:	$67,243
TFCA Cost 40%:	$67,243
TFCA Cost 60%:	
Total TFCA Cost:	$67,243

Emission Reduction Calculations

Step 1 - Emissions for Eliminated Trips

A	B	C	D	E	F	G	H	I
# Trips/Day (1-way)	Days/Yr	Trip Length (1-way)	VMT	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
27	9	14	3,402	1,936	2,269	680	1,437,990	4,885
26	254	14	92,456	52,614	61,655	18,491	39,080,195	132,760
120	100	8	96,000	61,116	67,392	19,200	40,578,207	147,708
		Total	191,858	115,666	131,316	38,372	81,096,392	285,353

Step 2 - Emissions for New Trips to Access Transit /Ridesharing

A	B	C	D	E	F	G	H	I
			0	0	0	0	0	0
			0	0	0	0	0	0
			0	0	0	0	0	0
		Total	0	0	0	0	0	0

Step 3A - Emissions for Medium Duty Shuttle

Enter in Column D - Vehicle GVW
- For Shuttles 2=8,501-10,000, 3=10,001-14,000
- For Vanpools 1= 5,751-8,500, 2=8,501-10,000, 3=10,001-14,000

Enter in Column E (Emissions Rating)
- For Shuttles 2=Post-1994 diesel with CARB verified, **Level 3** (85%) filter; 3=Post-1994 diesel with CARB verified, **Level 3** (85%) + **NOx** filter; 4=Post-1994 diesel with CARB verified, **Level 1** (25%) filter; 5=Post-1994 diesel with CARB verified, **Level 2** (50%) filter; 6=1989-1994 gas; 7=LEV; 8=ULEV; 9=SULEV; 10=ZEV
- For Vanpools 1=Baseline default, 7=LEV, 8=ULEV, 9=SULEV, 10=ZEV

A	B	C	D	E	F	G	H	I	J	K
# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	Vehicle GVW	Emissions Rating	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
			1	1	0	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0
				Total	0	0	0	0	0	0

Step 3B - Emissions for Buses

Bus Type
- Diesel Bus with CARB verified, **Level 3** (85%) filter: 1 = 1994/95, 2 = 1996-2001, 3 = 2002, 4 = 2003, 5 = 2004
- Diesel Bus with CARB verified, **Level 3** (85%) + NOx reduction filter: 6 = 1994/95, 7 = 1996-2001, 8 = 2002, 9 = 2003, 10 = 2004
- Diesel Bus with CARB verified, **Level 1** (25%) filter: 11 = 1994/95, 12 = 1996-2001, 13 = 2002, 14 = 2003, 15 = 2004
- Diesel Bus with CARB verified, **Level 2** (50%) filter: 16 = 1994/95, 17 = 1996-2001, 18 = 2002, 19 = 2003, 20 = 2004
- Gas Bus 21 = 1989/90, 22 = 1991-1993, 23 = 1994/95, 24 = 1996-2001, 25 = 2002, 26 = 2003, 27 = 2004
- Alternate Fuel Bus (CNG, LNG, or hybrid-electric) NOx certification level 1.5 g/bhp-hr = 28, 1.8 g/bhp-hr = 29, 2.0 g/bhp-hr = 30, 2.5 g/bhp-hr = 31
- Electric Bus = 32

A	B	C	D	E	F	G	H	I	J
# Vehicles	Engine Year, Make, & Model	Retrofit Device Name	Bus Type	Total Annual VMT (sum all vehicles)	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	PM10 Emissions (gr/yr)	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
			1	0	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0
			Total	0	0	0	0	0	0

Cost Effectiveness Results

	Annual	Lifetime	
1. VMT Reduced	191,858	959,290	Miles
2. Trips Reduced	18,847	94,235	Trips
3. ROG Emissions Reduced	0.13	0.64	Tons
4. NOx Emissions Reduced	0.14	0.72	Tons
5. PM Emissions Reduced	0.04	0.21	Tons
6. CO2 Emissions Reduced	89.3	446.6	Tons
7. Emission Reductions (ROG, NOx & PM)	0.31	1.57	Tons
8. TFCA Project Cost - Cost Effectiveness		$42,794	/Ton
9. Total Project Cost - Cost Effectiveness (ROG, NOx & PM)		$42,794	/Ton

Scoring

Criteria	Points
1. TFCA Funding Effectiveness	48
2. Other Project Attributes	
3. Clean Air Policies & Programs	10
4. Disadvantaged Communities	
5. Promote Alternative Transportation Mc	5
Total	63

Notes

If the project involves filters, does the Air District purchase at least one of them?
Yes No If yes, PM Fund sponsors must also do monitoring form #5.

Instructions for Steps 1, 2, 3:

Step 1: Data for vehicle trips that project will eliminate:
Enter # one-way trips reduced per day (one round trip = 2 one-way trips), # days per year, and average one-way trip length in Columns A, B, and C
Note: Clearly explain your assumptions.

Step 2: Data for vehicle trips to access transit or vanpool:
This step accounts for the short access trips from home to transit station or vanpool pick-up point (e.g. Park & Ride lot).

Step 3: Data for shuttle or vanpool trips:
Use Step 3A for medium duty vehicles
* Enter Gross Vehicle Weight category in Column D
  Ensure that Shuttles only use "2" or "3". Vanpools should be "1"
* Enter emissions ratings in Column E
  Note that different emission ratings are available to shuttles versus vanpools
* Enter "1" in Columns D & E and "0" in Column F if you do not have a vehicle to enter in one of the rows.
* Enter in Column F total annual miles for all the shuttle/ vanpool vehicles

Use Step 3B for buses:
* In Column D, enter the proper number (1 through 27) that

  corresponds to the bus that will be used.
* In Column E enter the combined total annual miles for all the buses.

* Enter "1" in Column D and "0" in Column E if you do not have a vehicle to ente in one of the rows.

RIDESHARING, BICYCLE, SHUTTLE, AND SMART GROWTH PROJECTS

Only make entries in shaded areas.

General Project Information

Project Sponsor:	Marin County/DPW	**Date Created:**	30-Mar-05
Project Title:	Los Ranchitos Rd. Class 2 Bikeway	**Application #:**	05MAR05
Project Sponsor Contact:	Jack Baker, Senior Transportation Engineer	**Project Type Code:**	7b
Project Sponsor Phone #:	(415) 499-6523	**Calculated by:**	Jack Baker
Project Sponsor Address:	P.O. Box 4186 San Rafael, CA	**Project Sponsor E-mail:**	jbaker@co.marin.ca.us
		Project Sponsor City/Zip:	San Rafael 94913

Cost Effectiveness Inputs

# Years Effectiveness:	20
Total Project Cost:	$877,424
TFCA Cost 40%:	$160,000
TFCA Cost 60%:	
Total TFCA Cost:	$160,000

Emission Reduction Calculations

Step 1 - Emissions for Eliminated Trips

# Trips/Day (1-way)	Days/Yr	Trip Length (1-way)	VMT	ROG Emissions (gr/yr)	NOx Emissions (gr/yr)	Exhaust &Trip End PM10 Emissions (gr/yr) *	Other PM10 Emissions (gr/yr) *	CO2 Emissions (gr/yr)	Total ROG, NOX & PM Emissions (gr/yr)
75.2	254	4	76,403	34,038	27,944	1,356	15,663	32,294,842	63,338
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	76,403	34,038	27,944	1,356	15,663	32,294,842	63,338

Step 2 - Emissions for New Trips to Access Transit /Ridesharing

A	B	C	D	E	F	G	H	I	J
0	0	0	0	0	0	0	0	0	0
			0	0	0	0	0	0	0
			0	0	0	0	0	0	0
		Total	0	0	0	0	0	0	0

Step 3A - Emissions for Medium Duty Shuttle

Enter in Column D - Vehicle GVW - For Shuttles 2=8,501-10,000, 3=10,001-14,000
- For Vanpools 1= 5,751-8,500, 2=8,501-10,000, 3=10,001-14,000

Enter in Column E (Emissions Rating) - For Shuttles 2=Post-1994 diesel with CARB verified, **Level 3** (85%) filter; 3=Post-1994 diesel with CARB verified, **Level 3** (85%) + **NOx** filter; 4=Post-1994 diesel with CARB verified, **Level 1** (25%) filter; 5=Post-1994 diesel with CARB verified, **Level 2** (50%) filter; 6=1989-1994 gas; 7=LEV; 8=ULEV; 9=SULEV; 10=ZEV

- For Vanpools 1=Baseline default, 7=LEV, 8=ULEV, 9=SULEV, 10=ZEV

A # Vehicles	B Engine Year, Make, & Model	C Retrofit Device Name	D Vehicle GVW	E Emissions Rating	F Total Annual VMT (sum all vehicles)	G ROG Emissions (gr/yr)	H NOx Emissions (gr/yr)	I Tailpipe PM10 Emissions (gr/yr)	J Other PM10 Emissions (gr/yr)	K CO2 Emissions (gr/yr)	L Total ROG, NOX & PM Emissions (gr/yr)
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
			1	1	0	0.00	0.00	0.00	0.00	0.00	0
				Total	0	0	0	0	0	0	0

Step 3B - Emissions for Buses

Bus Type
- Diesel Bus with CARB verified, **Level 3** (85%) filter: 1 = 1994/95, 2 = 1996-2001, 3 = 2002, 4 = 2003, 5 = 2004
- Diesel Bus with CARB verified, **Level 3** (85%) + NOx reduction filter: 6 = 1994/95, 7 = 1996-2001, 8 = 2002, 9 = 2003, 10 = 2004
- Diesel Bus with CARB verified, **Level 1** (25%) filter: 11 = 1994/95, 12 = 1996-2001, 13 = 2002, 14 = 2003, 15 = 2004
- Diesel Bus with CARB verified, **Level 2** (50%) filter: 16 = 1994/95, 17 = 1996-2001, 18 = 2002, 19 = 2003, 20 = 2004
- Gas Bus 21 = 1989/90, 22 = 1991-1993, 23 = 1994/95, 24 = 1996-2001, 25 = 2002, 26 = 2003, 27 = 2004
- Alternate Fuel Bus (CNG, LNG, or hybrid-electric) NOx certification level 1.5 g/bhp-hr = 28, 1.8 g/bhp-hr = 29, 2.0 g/bhp-hr = 30, 2.5 g/bhp-hr = 31
- Electric Bus = 32

A # Vehicles	B Engine Year, Make, & Model	C Retrofit Device Name	D Bus Type	E Total Annual VMT (sum all vehicles)	F ROG Emissions (gr/yr)	G NOx Emissions (gr/yr)	H Tailpipe PM10 Emissions (gr/yr)	I Other PM10 Emissions (gr/yr)	J CO2 Emissions (gr/yr)	K Total ROG, NOX & PM Emissions (gr/yr)
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			1	0	0.00	0.00	0.00	0.00	0.00	0
			Total	0	0	0	0	0	0	0

Cost Effectiveness Results

	Units	Tons	
1. VMT Reduced	76,403	1,528,064	Miles
2. Trips Reduced	19,101	382,016	Trips
3. ROG Emissions Reduced	0.04	0.75	Tons
4. NOx Emissions Reduced	0.03	0.62	Tons
5. PM Emissions Reduced	0.02	0.37	Tons
6. CO2 Emissions Reduced	35.6	711.3	Tons
7. Emission Reductions (ROG, NOx & PM)	0.09	1.74	Tons
8. TFCA Project Cost - Cost Effectiveness (ROG, Nox & PM)		$91,948	/Ton
9. TFCA Project Cost - Cost Effectiveness (ROG, NOx & Weighted PM)		$79,644	/Ton

* Weighted PM 10 means that tailpipe PM emissions have been multiplied by factor of 10, consistent w CARB methodology for Carl Moyer Program, to reflect the negative impact of tailpipe PM on public health.

Points

Criteria	Points
1. TFCA Funding Effectiveness	30
2. Other Project Attributes	15
3. Clean Air Policies & Programs	10
4. Disadvantaged Communities	
5. Promote Alternative Transportation Mc	5
Total	60

Notes

If the project involves filters, does the Air District purchase at least one of them? Yes No If yes, PM Fund sponsors must also do monitoring form #5.

Instructions for Steps 1, 2, 3:

Step 1: Data for vehicle trips that project will eliminate:
Enter # one-way trips reduced per day (one round trip = 2 one-way trips), # days per year, and average one-way trip length in Columns A, B, and C
Note: Clearly explain your assumptions.
Step 2: Data for vehicle trips to access transit or vanpool:
This step accounts for the short access trips from home to transit station or vanpool pick-up point (e.g. Park & Ride lot).

Step 3: Data for shuttle or vanpool trips:
Use Step 3A for medium duty vehicles
* Enter Gross Vehicle Weight category in Column D
Ensure that Shuttles only use "2" or "3". Vanpools should be "1"
* Enter emissions ratings in Column E
Note that different emission ratings are available to shuttles versus vanpools
* Enter "1" in Columns D & E and "0" in Column F if you do not have a vehicle to enter in one of the rows.
* Enter in Column F total annual miles for all the shuttle/ vanpool vehicles

Use Step 3B for buses:
* In Column D, enter the proper number (1 through 27) that corresponds to the bus that will be used.
* In Column E enter the combined total annual miles for all the
* Enter "1" in Column D and "0" in Column E if you do not have in one of the rows.